

Name: _____

HW#16: Translations

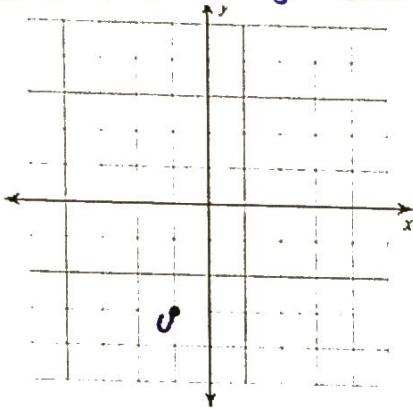
Geometry

Due: Friday, October 2nd

Failure to show work will result in LaSalle.

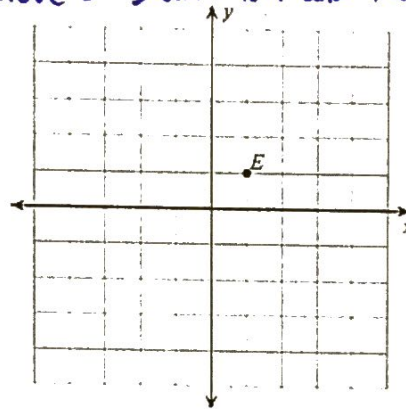
1) Translation: 2 units right and 5 units up.

move "U" 2 units right and 5 units up



2) Translation: 5 units left and 1 unit down

move "E" 5 units left and 1 unit down

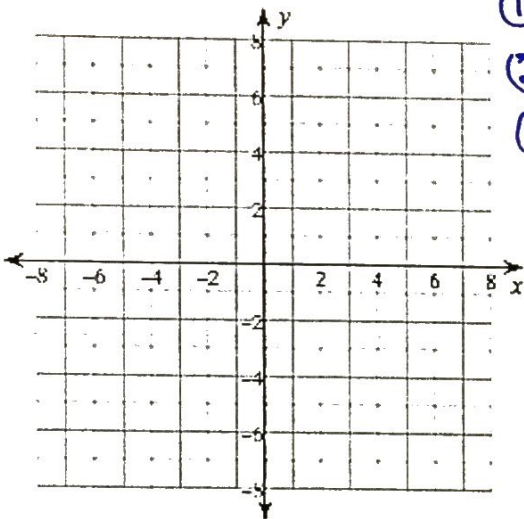


3) Graph the triangle ABC with vertices: A (1, -2), B (1, -4), C (3, -3). On the graph, label the coordinates of the vertices if the triangle is translated 3 units up and 6 units to the left.

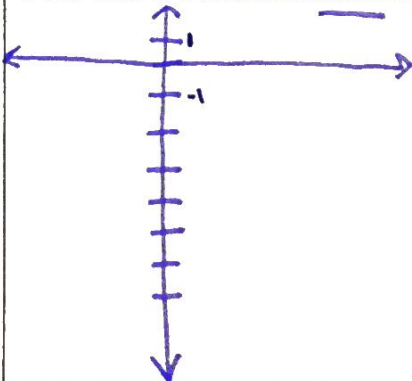
① Plot A, B, C

② Translate A, B, C 3 units up and 6 units to the left

③ label new points A', B', C'



4) Write the equation of the line $f(x) = 5x + 0.5$ if the line is translated down the y-axis 4 units.



5) Suppose the line $h(x)$ is parallel to the line $g(x)$. If $g(x) = -0.5x + 45$, what is one possible equation for $h(x)$?

What does parallel mean?

~~Justify your answer in at least 1 complete sentence.~~

Write equation

Flip →

BE YOUR BEST SELF

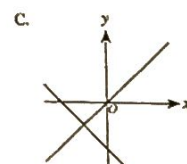
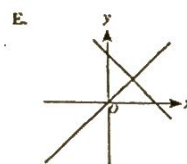
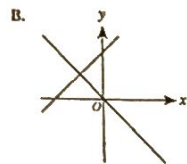
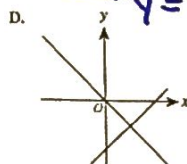
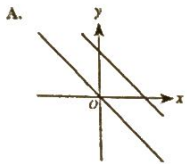
For each question below, justify your answer in at least 1 complete sentence.

6)

Which graph best presents the following system of equations and its solution?

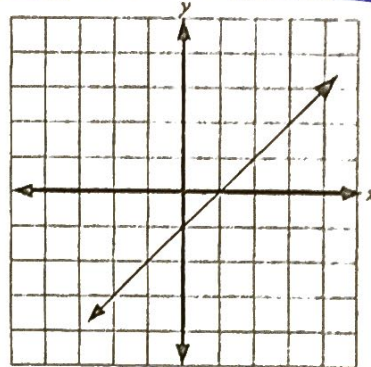
$$\begin{aligned} x + y &= 4 \\ x - y &= 0 \end{aligned}$$

$$\begin{aligned} &\rightarrow y = -x + 4 \\ &\rightarrow y = x \end{aligned}$$



7.

The equation for this line is $y = x - 1$. What would the equation for the line be if the line were moved up the y-axis 3 units?



A. $y = \frac{1}{3}x - 1$

B. $y = x - 3$

C. $y = x + 2$

~~D. $y = x + 3$~~

E. $y = 3x - 1$